REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-22, 25, 27-34, 36, 40, 41 and 43-48 are pending in this application. Claims 1, 9, 29 and 40 are in independent form. Claim 16 is amended. Claim 48 is a new claim.

Rejection under 35 U.S.C. §101

Claim 16 stands rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Without acquiescing to the propriety of the rejection and solely in order to advance prosecution, claim 16 is amended taking into consideration the Examiner's comments. Applicants respectfully request that the rejection of claim 16 under 35 U.S.C. §101 be withdrawn.

Example Embodiments

Applicants provide the following example embodiments to assist the Examiner in understanding the subject matter of the present application.

An important concept of an embodiment of the invention is that, prior to the signing of access operations to electronic data, first a security check is performed in order to ascertain the identity of a user. The user is assigned a unique user signature and additionally a role signature on the basis of the result of this security check. The role signature is able to be assigned to a plurality of different users. Data access operations are signed by specifying the user signature and additionally the role signature. Neither the user signature nor the role signature can be viewed by the user. Applicants' specification as-published, paragraph [0009].

The signing of data access operations by specifying both the user signature and the role signature affords the advantage that a signature provides all the information for subsequent reconstruction of the identity and the role of a party accessing data at the time of the data access. In addition, the signatures are extremely well protected against manipulation, since they are assigned on the basis of a security check and cannot be viewed by the user, which means that he cannot misuse them. Another advantage is that the method requires just one security check from the user, but otherwise takes place fundamentally unnoticed by the users, and is therefore particularly easy and noncomplex to handle. Applicants' specification as-published, paragraph [0010].

An advantageous refinement of an embodiment of the invention is obtained by virtue of each user admittedly being able to be assigned just one user signature, but being able to be assigned a plurality of role signatures simultaneously. This reflects the actual role affiliations, since one user can be active, by way of example, in a plurality of functions or as a member of a plurality of teams which each represent separate roles. The possibility of being affiliated to a plurality of role signatures affords the advantage that the real role affiliations can be depicted completely by the signatures. Applicants' specification as-published, paragraph [0013].

According to example embodiments, the user signature is stored in a user signature memory. Applicants' specification as-published, paragraph [0022]. The user signature is assigned as the result of a previous check in the user signature memory after identification of the user. Applicants' specification as-published, paragraphs [0023] and [0024]. The user is assigned a unique user signature. Applicants' specification as-published, paragraph [0010].

Rejections under 35 U.S.C. § 103

Claims 1-22, 25, 27-34, 36, 40, 41 and 43-47 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bradee (U.S. 2002/0095571, hereinafter "Bradee") in view of Ballantyne (US 5,867,821, hereinafter "Ballantyne"). Applicants respectfully traverse these rejections.

No User Signature in Bradee or Ballantyne

Neither Bradee nor Ballantyne, alone or in combination, disclose at least, "performing a security check upon each access operation in order to ascertain the identity of a user; assigning a user signature, identifying the user, on the basis of the performed security check without being viewable by the user[.]"

Bradee discloses authentication using a user ID provided by a user. Bradee, paragraph [0038]. If authentication succeeds, the security broker retrieves a "surrogate ID" and password that represent the role of a user. Bradee, paragraph [0042]. The surrogate ID represents, "all those who have a particular user role assigned to them." Bradee, paragraph [0054].

The Examiner alleges that, "Bradee teaches ... see paragraphs 41 and 42 wherein the surrogate ID corresponds to the 'user signature'[.]" Office Action, p. 3.

Applicants respectfully disagree.

Claim 1 requires, "assigning a user signature, <u>identifying the user</u>, on the basis of the performed security check[,]" emphasis added. The surrogate ID of Bradee does not identify the "user" as recited by claim 1. The surrogate ID is created by associating user-IDs with the appropriate user roles in a data store and are "used to represent all those who have a particular user role assigned to them." Bradee, paragraph [0054]. Thus, because a single surrogate ID represents all people with a

particular user role, it cannot "identify a user" as required by claim 1. MPEP 2111.01. See also, Bradee, paragraph [0060] ("only role-based access control has been described").

Applicants note that Bradee discloses that, "the user is identified by the surrogate ID and associated user role" in paragraph [0047]. Initially, Applicants note that Bradee taken as a whole discloses a user is identified as being part of an identified group having certain access and not that a user is identified. Further, the Examiner does not allege that the associated user role is part of a user signature. The Examiner only alleges that the surrogate ID of Bradee corresponds to the user signature of claim 1. The surrogate ID of Bradee is nowhere disclosed as identifying any user.

Ballantyne discloses an identification and authentication process. Ballantyne, col. 8, lines 28-38. No signature is assigned based on the process. Accordingly, Ballantyne cannot repair the deficiency of Bradee. Further, Applicants note that the Examiner specifically asserts that Ballantyne is not used for any signature, stating that, "[f]or the sake of clarity, Ballantyne is only relied upon to teach signing access operations. Bradee is already cited to teach the actual signatures." Office Action, pp. 3 and 4.

Bradee in view of Ballantyne fails to disclose, at least, "performing a security check upon each access operation in order to ascertain the identity of a user; assigning a user signature, identifying the user, on the basis of the performed security check without being viewable by the user[.]"

Different Claim Terms Must Be Given Different Meanings

The Examiner alleges that both the "user signature" and the "role signature" of claim 1 equate to the surrogate ID of Bradee. However, different claim terms cannot be interpreted to have the same meaning.

Different claim terms are presumed to have different meanings. Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1333 n. 3 (Fed. Cir. 2006) ("[T]he use of two terms in a claim requires that they connote different meanings"); CAE Screenplates Inc. v. Heinrich Fiedler GmbH, 224 F.3d 1308, 1317 (Fed. Cir. 2000) ("In the absence of evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings.").

Applicants note that the Examiner alleges that in addition to the surrogate ID (the alleged user signature), the alleged role signature of Bradee includes a password. The addition of the password is not sufficient to remove the Examiner's interpretations from the rule forbidding assignment of the same meaning to more than one claim term. This is at least because claim 1 does not require a role signature to include a password.

The Examiner's Motivation Does Not Exist

The Examiner alleges that, "it would have been obvious to one of ordinary skill in the art to modify the Bradee reference to sign access operations using said signatures to keep a record of when and who accessed data[.]" Office Action, p. 4.

The Examiner specifically alleges that the user signature of claim 1 corresponds to the surrogate ID of Bradee and that the role signature of claim 1 corresponds to the surrogate ID and password of Bradee. As described above, the surrogate ID of Bradee identifies a group of individuals and not an individual. Accordingly, a combination of

Bradee and Ballantyne would not result in a record of "who" accessed data as alleged by the Examiner. Therefore, Applicants respectfully submit that the Examiner's motivation to combine does not exist.

No Security Check Each Access Operation

Claim 1 requires, *inter alia*, "performing a security check upon each access operation in order to ascertain the identity of a user[.]" Bradee discloses issuing a token to replace security checks for a period of time (e.g., 4 hours). Bradee, paragraph [0044]. Therefore, Bradee fails to disclose performing a security check upon each access operation, as required by claim 1. Applicants note that the Examiner does not point to any portion of Bradee or Ballantyne for disclosure of this feature.

Nonobviousness

For at least the reasons stated above, even assuming, arguendo, that Bradee and Ballantyne could be combined (which Applicants do not admit), Bradee in view of Ballantyne cannot render claim 1 obvious. Claims 9, 29 and 40 are patentable for reasons at least similar to those stated above with respect to claim 1, noting that claims 9, 29 and 40 should be interpreted solely based on the limitations recited therein. Claims 2-8, 10-22, 25, 27, 28, 30-34, 36, 41 and 43-46 are patentable at least by virtue of their dependence on at least one of claims 1, 9, 29 or 40. Withdrawal of the rejections and allowance of each of claims 1-22, 25, 27-34, 36, 40, 41 and 43-46 is respectfully requested.

CONCLUSION

In view of the above remarks and amendments, Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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